UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
Seneca Foods, Baraboo, Wisconsin

FROM: Emma Leeds, Environmental Engineer
AECAB (IL/IN)

THRU: Nathan Frank, Section Supervisor
AECAB (IL/IN)

TO: File

BASIC INFORMATION

Facility Name: Seneca Foods

Facility Location: 801 Sauk Ave, Baraboo, WI 53913

Date of Inspection: 5/12/2022

EPA Inspector(s):
1. Emma Leeds, Environmental Engineer
2. Linda Rosen, Environmental Engineer

Other Attendees:
1. Laura Mushinski, Director of Environmental Affairs – Seneca Foods
2. Bryce Hall, Technical and Environmental Manager – Seneca Foods
3. Jim Quinlan, Director of Can Manufacturing – Seneca Foods
4. Khatib Mohammad, Emissions Project Manager – TRC Companies, Inc. (only during tour)
5. Gavin Lewis, Project Manager – TRC Companies, Inc. (only during tour)

Contact Email Address: bhall@senecafoods.com; lmushinski@ senecafoods.com

Purpose of Inspection: To investigate compliance with the Clean Air Act

Facility Type: Metal can and can end manufacturing

Regulations Central to Inspection: Wisconsin Department of Natural Resources Part 70 Operation Permit 157007840-P30, including VOC limit of 16,500 pounds VOC per month per coating line.

Arrival Time: 10:30 AM
Departure Time: 12:30 PM

Inspection Type:
☒ Unannounced Inspection
☐ Announced Inspection

OPENING CONFERENCE

☒ Presented Credentials
☒ Stated authority and purpose of inspection
☐ Provided Small Business Resource Information Sheet
☒ Small Business Resource Information Sheet not provided. Reason: not a small business
☒ Provided CBI warning to facility

The following information was obtained verbally from Seneca Foods personnel unless otherwise noted.

Process Description:
Seneca Foods receives approximately 20,000 pounds of steel coils per month which are cut into sheets, put onto pallets, and banded. In one of four coating and curing lines, sheets receive either interior coating if they will be used to make can bodies, or both interior and exterior coating if they will be used to make can ends, and then move through a curing oven. For can bodies, the sheets are cut longitudinally and laterally into smaller rectangles and then rolled into a cylinder shape and welded together. Immediately after welding, a "side-stripe" coating seam is applied on the inside of the can in one of eight side seam coating lines. Can ends are then punched out of the sheets with both interior and exterior coating and mechanically folded onto the bottom rim of the can bodies. A water-based sealant is applied between the can body and can end to create a gasket. Open cans are then quality checked for leaks, loaded onto pallets, and transported to other Seneca Foods facilities along with sleeves of can ends that will eventually be used to enclose the top of the can.

Each of the main four coating and oven lines has a designated catalytic oxidizer to control volatile organic compound (VOC) emissions. The eight side seam coating lines are uncontrolled.

Staff Interview:
Seneca Foods produces 1.3 billion open cans and 2.6 billion can ends per year. The facility operates 24/7 with 320 employees.

Seneca Foods currently calculates that it emits around 100 tons of VOCs per year and over 10 tons of xylene per year. The side seam process is believed to be the largest contributer to VOC and hazardous air pollutants (HAP) emissions at the facility; although the main coating lines are used more often, emissions from the side seam process are uncontrolled. Side seam emissions are calculated based off usage amounts and the pounds of VOCs and HAPs per gallon of solids. Seneca Foods mostly uses a liquid side stripe material, but occasionally uses a powder side stripe material that does not contain HAPs.

One catalytic oxidizer is cleaned per year so that all four catalytic oxidizers are cleaned every four years. Catalysts are replaced approximately every three cleanings, or every twelve years. Seneca Foods performs capture and control testing for each catalytic oxidizer every five years. Testing is also performed to establish inlet temperature and duct pressure operating setpoints for the catalytic oxidizers. On the day of the inspection, performance testing using a temporary total enclosure was being performed for the Oven 2 catalytic oxidizer.

Inlet temperature to the catalytic oxidizers is measured every five minutes and duct pressure is measured continuously. If either operating parameter falls beneath its setpoint, the system interlocks and the coaters and ovens stop running. The temperature and duct pressure monitoring devices are inspected monthly and calibrated yearly.

Around 2016, Seneca Foods self-reported to the Wisconsin Department of Natural Resources that their previous HAP limits had been surpassed due to a change in their coating formulation. This change made the facility a major source for HAPs, and made the facility subject to the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Metal Cans (NESHAP KKKK).

Cleaning solvents including toulene and MEK are used to clean the coating lines.

TOUR INFORMATION

EPA Tour of the Facility: Yes

Data Collected and Observations:
EPA observed coating lines 1 and 2. Coating was applied to sheets like a paint roller. Seneca Foods personnel shared that after coating, sheets are cured in the ovens for fifteen minutes.

EPA spoke with several personnel from the stack testing company, TRC, that was performing testing on coating line 2 during the inspection. TRC personnel explained several measures taken to ensure that the temporary total enclosure is sufficient, including measuring emission concentrations to the catalytic oxidizer before and after the enclosure is installed, and making sure natural draft openings (NDOs) are located a distance of at least four times the diameter of the NDO away from any emission point. Seneca Foods also shared that only can end coating is performed during performance testing because it is the process that uses the most coating.

EPA observed several coating lines and side seam lines with a Forward Looking Infrared (FLIR) camera but did not record any videos.

Photos and/or Videos: were taken during the inspection.

Field Measurements: were not taken during this inspection.

CLOSING CONFERENCE

☒ Provided U.S. EPA point of contact to the facility

Requested documents:

- Compliance Assurance Monitoring Plan
- Most recent operating permit including HAP major source determination

DIGITAL SIGNATURES

Report Author: Leeds, Emma Digitally signed by Leeds, Emma Date: 2022.07.08 13:36:26 -05'00'

Section Supervisor: Frank, Nathan Digitally signed by Frank, Nathan Date: 2022.07.13 21:11:28 -05'00'

APPENDICES AND ATTACHMENTS

1. Digital Image Log

Facility Name: Seneca Foods
Facility Location: 801 Sauk Ave, Baraboo, WI
Date of Inspection: May 12, 2022

APPENDIX A: DIGITAL IMAGE LOG

1. **Inspector Name:** Linda Rosen	2. **Archival Record Location:** USEPA Region 5 Electronic Records Center

Image Number	File Name	Date	Description of Image
1	P5120007.JPG	5/12/22	Coating line 2
2	P5120008.JPG	5/12/22	Coating line 2
3	P5120009.JPG	5/12/22	Temporary total enclosure for performance test for coating line 2
4	P5120010.JPG	5/12/22	Coating application machine in coating line 2
5	P5120011.JPG	5/12/22	Side seam process
6	P5120012.JPG	5/12/22	Gasket application process

Photos were taken between 11:48 AM and 12:20 PM CT.